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VOL. 1, NO. 1 NOVEMBER, 1906

BULLETIN
OF
LAFAYETTE COLLEGE

AUTUMN ANNOUNCEMENTS

PUBLISHED QUARTERLY BY LAFAYETTE COLLEGE

Second-class postal rate applied for at the
Post-office, Easton, Pa.

BULLETIN
OF
LAFAYETTE COLLEGE

INCLUDING THE COURSES OF STUDY
IN THE
CLASSICAL AND SCIENTIFIC DEPARTMENTS

EMBRACING THE
SCHOOLS OF CIVIL, MINING AND ELECTRICAL ENGINEERING, AND OF CHEMISTRY

EASTON, PENNSYLVANIA
NOVEMBER, 1906

VERITAS LIBERABIT.

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CALENDAR.

1906.

September 13, Thursday	College year began.
October 24, Wednesday	Founders' Day.
December 19, Wednesday	First term ends.

1907.

January 3, Thursday	Second term begins.
January 24, Thursday	Day of Prayer for Colleges.
February 22, Friday	Senior Prize Debate.
March 20, Wednesday	Second term ends.
April 4, Thursday	Third term begins.
May 13, Monday	Junior Oratorical Contest.
May 23–27	Final Examination of the Senior Class.
May 30, Thursday	Memorial Day, Barge Oratorical Contest.
June 13–17	Examination of the lower classes.
June 16, Sunday	Baccalaureate Sermon.
	Sermon before the Brainerd Society.
June 17, Monday	Senior Class Day and Concert.
June 18, Tuesday	Seventy-Fifth Anniversary Celebration.
June 19, Wednesday	Commencement Exercises.
June 20, Thursday	Examinations for admission.

September 9, Monday	Registration for entrance.
September 10–11	Examinations for admission.
September 12, Thursday	College year begins.
October 23, Wednesday	Founders' Day.
November 28, Thursday	Thanksgiving Day.
December 18, Wednesday	First term ends.

1908.

January 2, Thursday	Second term begins.
January 30, Thursday	Day of Prayer for Colleges.
March 18, Wednesday	Second term ends.

FACULTY.

REV. ETHELBERT DUDLEY WARFIELD, D.D., LL.D.,
President, Professor of History and Political Science.
(John I. Blair Foundation.)

FRANCIS ANDREW MARCH, LL.D., L.H.D., D.C.L., Litt.D.,
Emeritus Professor of the English Language and Comparative Philology.

REV. AUGUSTUS A. BLOOMBERGH, A.M., PH.D.,
Emeritus Professor of Modern Languages.

REV. ROBERT BARBER YOUNGMAN, A.M., PH.D.,
Professor of the Greek Language and Literature.

REV. SELDEN JENNINGS COFFIN, A.M., PH.D., *Retired.*
(James H. Coffin Professorship of Astronomy.)

JAMES W. MOORE, A.M., M.D.,
Dean of the Pardee Scientific Department, Professor of Mechanics and Experimental Philosophy.

CHARLES McINTIRE, A.M., M.D.,
Lecturer on Sanitary Science.

JOSEPH JOHNSTON HARDY, A.M., PH.D.,
Professor of Mathematics and Astronomy.
(George Hollenback Professorship of Mathematics.)

WILLIAM BAXTER OWEN, A.M., PH.D.,
Professor of the Latin Language and Literature.

EDWARD HART, PH.D.,
Professor of Analytical Chemistry.
(William Adamson Professorship of Analytical Chemistry.)

JAMES MADISON PORTER, C.E.,
Professor of Civil and Topographical Engineering.

FRANCIS A. MARCH, JR., A.M., PH.D.,
Francis A. March Professor of the English Language.

WILLIAM SHAFER HALL, C.E., E.M., M.S.,
Professor of Mining Engineering and Graphics.
(George B. Markle Professorship.)

JACOB D. UPDEGROVE, A.M., M.D.,
Lecturer on Hygiene, Director of Physical Training.

EDGAR MOORE GREEN, A.M., M.D.,
Consulting Physician in the Department of Physical Training.

ALVIN DAVISON, A.M., PH.D.,
Professor of Biology.
(Jesse Chamberlain Professorship of Botany.)

FREDERICK BURRITT PECK, PH.D.,
Professor of Mineralogy and Geology.

AMORY PRESCOTT FOLWELL, A.B.,
Professor of Municipal Engineering.

REV. JOHN MOFFAT MECKLIN, A.M., PH.D.,
Professor of Mental and Moral Philosophy and Hebrew.
(James Renwick Hogg Professorship.)

REV. JOHN FREDERICK LOUIS RASCHEN, A.M.,
Professor of Modern Languages.

HENRY WYSOR, B.S.,
Assistant Professor of Analytical Chemistry and Metallurgy.

ALLAN ROBERTS, PH.B., M.S.,
Assistant Professor of History.

LEONARD PERLEY DICKINSON, B.S.,
Assistant Professor of Electrical Engineering.

JAMES WADDELL TUPPER, PH.D.,
Assistant Professor of English Literature.

STANLEY EUGENE BRASEFIELD, C.E., M.S.,
Instructor in Mathematics and Graphics.

WILLIAM DARLINGTON LITTLE, A.M.,
Instructor in Mathematics.

JAMES H. DELONG, B.S.,
Instructor in Chemistry.

EDWIN DUBOIS CHASE, B.S.,
Instructor in Chemistry.

REV. CARL FREDERICK PFATTEICHER, A.B.,
Tutor in Latin.

WILLIAM MACKAY SMITH, PH.B.,
Tutor in Mathematics.

JOHN WHITNEY COLLITON, C.E.,
Instructor in Mathematics.

JAMES BRYANT HOPKINS, A.M.,
Instructor in Modern Languages.

FREDERICK RAYMOND HUNT, A.B.,
Instructor in Greek and German.

HARRY DANIEL BAILEY, A.B.,
Assistant in Biology.

EDWARD FRANKLIN FARQUHAR, A.B.,
Assistant in English.

COLLEGE OFFICERS.

ROBERT BARBER YOUNGMAN, PH.D.,
Clerk.

JAMES W. MOORE, A.M., M.D.,
Inspector of Buildings.

SAMUEL L. FISLER, A.M.,
Treasurer.

REV. JOHN F. STONECIPHER, D.D.,
Librarian.

REV. MAURICE A. FILSON,
Assistant Librarian.

EDWARD HART, PH.D.,
Curator of Gayley Hall, and Librarian of the Henry W. Oliver Library.

CHARLES B. GREEN, E.M.,
Registrar.

ALBERT MOORE LANE, PH.B.,
Assistant in Treasurer's Office.

CLASS DEANS.

SENIOR CLASS	The President.
JUNIOR CLASS	Professors Folwell and Mecklin.
SOPHOMORE CLASS	Professors Youngman and Hall.
FRESHMAN CLASS	Professors Hardy and Owen.

LAFAYETTE COLLEGE.

ADMISSION.

Every applicant for admission to the College is expected to report at the College offices and register immediately on his arrival. Before registering he must submit to the Registrar a satisfactory certificate of moral character from his pastor or some other person known to the College authorities, and a diploma or certificate of graduation from the school which he last attended, or, if he be not a graduate, a statement that he leaves the school with the approval of its principal and is honorably dismissed to this College, with a statement of the studies which he has pursued and the course which he desires to pursue. His application having been approved he is admitted to the examinations. Examinations are regularly held on the day following the annual commencement day in June, and the days preceding the first day of the autumn term in September, and also on the first day of the second and third terms.

Special attention is called to the changes in the entrance requirements since the publication of the 1905–'06 Catalogue. Candidates may now offer either German or French, and either Natural Philosophy or Chemistry, for admission to the Latin Scientific, General Scientific and Technical Courses.

REQUIREMENTS FOR ADMISSION TO THE FRESHMAN CLASS.

CLASSICAL COURSE.

For admission to the Classical Course candidates are examined in the following subjects:

Geography (A) and (B)
History (A) and (B).
Mathematics (A).
English.
Latin.
Greek.

(For detail of subjects, see pages 11–15.)

LATIN SCIENTIFIC COURSE.

For admission to the Latin Scientific Course candidates are examined in the following subjects:

Geography (A) and (B).
History (A) and (B).
Mathematics (A).
Natural Philosophy or Chemistry.
English.
Latin.
German (A) or French (A).

GENERAL SCIENTIFIC COURSE.

For admission to the General Scientific Course candidates are examined in the following subjects:

Geography (A).
History (A).
Mathematics (A) and (B).
Natural Philosophy or Chemistry.
English.
German (A) and (B), or
French (A) and (B).

CIVIL, MINING, ELECTRICAL ENGINEERING AND CHEMICAL COURSES.

For admission to the Schools of Engineering and Chemistry candidates are examined in the following subjects:

Geography (A).
History (A).
Mathematics (A) and (B).
English.
Natural Philosophy or Chemistry.
German (A) and (B) or French (A) and (B).

DETAIL OF SUBJECTS REQUIRED FOR ADMISSION TO THE FRESHMAN CLASS.

GEOGRAPHY (A).—Political or Physical Geography.

GEOGRAPHY (B).—Ancient Geography.

HISTORY (A).—*United States*: Johnston, McMaster or Fiske.

General History: Fisher or Freeman. Such books as Myers' and Swinton's General History are not recommended.

HISTORY (B).—*Roman History* to Augustus, and *Greek History* to Alexander. The requirements are intended to be additional to the requirement in General History, and should be met by the use of books on Roman and Greek History, such as Myers', "Rome, Its Rise and Fall;" Morey's, Leighton's, or Allen's Roman History, and Morey's or Oman's Greek History.

MATHEMATICS (A).—*Arithmetic*: Complete, including the Metric System.

Algebra: Through Radicals and Quadratics (first thirteen chapters of Wentworth's College Algebra, or an equivalent).

Geometry: Plane Geometry entire: as in Wentworth or Loomis.

MATHEMATICS (B).—*Solid Geometry*.

Algebra.—Properties of quadratic equations; indeterminate equations; inequalities; ratio, proportion, and variation; arithmetical, geometrical, and harmonical progressions (Chapters XIV, XV, XVI, XVII, and XVIII of Wentworth's College Algebra, or an equivalent).

Plane Trigonometry.—Through the solution of right and oblique triangles (Crawley or an equivalent); candidates should bring their logarithmic tables to the examination.

NATURAL PHILOSOPHY.—The elementary principles (Avery, Gage, or Hall and Bergen).

CHEMISTRY.—Elements of Inorganic Chemistry.

ENGLISH.—*Grammar*: A general examination will be given with special reference to any particular text-book to test familiarity with paradigms and syntactical analysis, and the correct use of English idioms.

Franklin's Autobiography and *Milton's Paradise Lost*, Books I and II; to be thoroughly studied as to subject-matter, form, and structure including the language used, as to its etymology, syntax, and prosody.

Prose Composition: The writing of a short essay will be required upon a subject drawn from the foregoing text-books. No candidate will be accepted in English whose work is notably deficient in point of spelling, punctuation, idioms, or division into paragraphs.

The works recommended for study by the Association of Colleges and Preparatory Schools of the Middle States and Maryland will be accepted in place of Franklin and Milton, as follows:—

For 1906, 1907, 1908: Shakespeare's *Julius Caesar*; Milton's *L'Allegro*, *Il Penseroso*, *Comus*, and *Lycidas*; Burke's *Speech on Conciliation with America*; Macaulay's *Essays on Milton* and *Addison*; Lincoln's *Gettysburg Address*.

1909, 1910, 1911: Shakespeare's *Macbeth*; Milton's *Lycidas*, *Comus*, *L'Allegro*, and *Il Penseroso*; Burke's *Speech no Conciliation with America*, or Washington's *Farewell Address* and Webster's *First Bunker Hill Oration*; Macaulay's *Life of Johnson*, or Carlyle's *Essay on Burns*.

In addition, the candidate may be required to answer questions involving the essentials of English grammar, and questions on the leading facts in those periods of English literary history to which the prescribed works belong.

Reading: Every candidate must have read a certain number o works of English literature. It is expected that the reading shall be done under the direction of an instructor and accompanied by frequent examinations during the preparatory course, for which four years is appropriate.

The candidate will be required to present evidence of a general knowledge of the subject-matter, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of several topics, to be chosen by the candidate from a considerable number—perhaps ten or fifteen—set before him in the examination paper. In place of a part or the whole of this test, the candidate may present an exercise book, properly certified by his instructor, containing compositions or other written work done in connection with the reading of the books. In preparation of this part of the requirement, it is important that the candidate shall have been instructed in the fundamental principles of rhetoric.

The books set for this part of the examination will be those recommended by the Association of Colleges and Preparatory Schools of the Middle States and Maryland, as follows:—

For 1906, 1907, 1908: Shakespeare's *Macbeth* and *The Merchant of Venice*; *The Sir Roger de Coverley Papers* in *The Spectator*; Irving's *Life of Goldsmith*; Coleridge's *The Ancient Mariner*; Scott's *Ivanhoe* and *The Lady of the Lake*; Tennyson's *The Passing of Arthur*, and one of the three Idyls, *Elaine*, or *Geraint and Enid*, or *Gareth and Lynette*; Lowell's *The Vision of Sir Launfal*; George Eliot's *Silas Marner*.

1909, 1910, 1911:

Group I (two to be selected).

Shakespeare's *As You Like It*, *Henry V*, *Julius Caesar*, *The Merchant of Venice*, *Twelfth Night*.

Group II (one to be selected).

Bacon's *Essays*; Bunyan's *The Pilgrim's Progress, Part I*; *The Sir Roger de Coverley Papers* in The Spectator; Franklin's *Autobiography*.

Group III (one to be selected).

Chaucer's *Prologue*; Spenser's *Faerie Queene* (selections); Pope's *The Rape of the Lock*; Goldsmith's *The Deserted Village*; Palgrave's *Golden Treasury* (*First Series*) *Books II and III*, with especial attention to Dryden, Collins, Gray, Cowper and Burns.

Group IV (two to be selected).

Goldsmith's *The Vicar of Wakefield*; Scott's *Ivanhoe*; Scott's *Quentin Durward*; Hawthorne's *The House of the Seven Gables*; Thackeray's *Henry Esmond*; Mrs. Gaskell's *Cranford*; Dickens' *A Tale of Two Cities*; George Eliot's *Silas Marner*; Blackmore's *Lorna Doone*.

Group V (two to be selected).

Irving's *Sketch Book*; Lamb's *Essays of Elia*; De Quincey's *Joan of Arc* and *The English Mail Coach*; Carlyle's *Heroes and Hero Worship*; Emerson's *Essays* (selected); Ruskin's *Sesame and Lilies*.

Group VI (two to be selected).

Coleridge's *The Ancient Mariner*; Scott's *The Lady of the Lake*; Byron's *Mazeppa* and *The Prisoner of Chillon*; Palgrave's *Golden Treasury* (*First Series*) Book *IV*, with especial attention to Wordsworth, Keats and Shelley; Macaulay's *Lays of Ancient Rome*; Poe's *Poems*; Lowell's *The Vision of Sir Launfal*; Arnold's *Sohrab and Rustum*; Longfellow's *The Courtship of Miles Standish*; Tennyson's *Gareth and Lynette*, *Lancelot and Elaine*, and *The Passing of Arthur*; Browning's *Cavalier Tunes*, *The Lost Leader*, *How They Brought the Good News from Ghent to Aix*, *Evelyn Hope*, *Home Thoughts from Abroad*, *Home Thoughts from the Sea*, *Incident of the French Camp*, *The Boy and the Angel*, *One Word More*, *Herré Riel*, *Pheidippides*.

LATIN.—*Grammar*: The Roman method of pronunciation is used.

Caesar: *Commentaries*, four books, for a portion of which an equivalent in Nepos will be received.

Cicero: *Orations*, seven.

Virgil: *Æneid*, six books; *Bucolics*.

Prose Composition: Daniell's, or equivalent.

GREEK.—*Grammar*: Pronunciation according to the written accents and in accordance with the preface to Goodwin's Grammar or Hadley-Allen's, Sections 11, 14, 19, 20, 21.

Xenophon: *Anabasis*, four books, for a portion of which an equivalent in The Cyropaedia will be received.

Homer: *Iliad* or *Odyssey*, three books; or

New Testament: *Gospels*, three.

Prose Composition: Collar and Daniell, or equivalent.

GERMAN (A).—An accurate knowledge of the principles of grammar, especially the inflection of articles, adjectives, pronouns, and nouns; the conjugation of the weak and strong verbs; the uses of the model auxiliaries; the prepositions and their government; the elementary rules of syntax and word order; to be able to read at sight ordinary German prose. It is believed that this requisite facility can be acquired by reading not less than two hundred duodecimo pages of simple German.

GERMAN (B).—This includes a thorough knowledge of accidence of the elements of word-formation, and of the principal uses of the prepositions and conjunctions. The candidate should be familiar with the essentials of German syntax, and must possess the ability to translate into German easy English prose; to translate at sight passages from standard classical authors. The reading of at least three hundred and fifty pages in addition to that required under German (A) will develop such ability. For examination no specific authors or work are designated. All candidates are required to bring a statement from their teacher, mentioning text-books used and authors read, including the number of pages translated.

FRENCH (A).—This embraces a thorough knowledge of the rudiments of grammar, including the inflection of the regular and the more common irregular verbs; the inflection of nouns and adjectives for gender and number; the uses of articles and partitive constructions; the forms and positions of personal pronouns; the uses of the other pronouns. Candidates should be able to read at sight ordinary modern prose. It is believed that this ability is acquired by reading two hundred duodecimo pages from the works of at least three different authors.

FRENCH (B).—Candidates should show a thorough knowledge of accidence, and a familiarity with the essentials of French syntax, especially the uses of the tenses, modes, prepositions and conjunctions. They must be able to translate into French a connected passage of simple English, and to translate at sight standard French authors. This proficiency may be acquired by reading, in addition to that required under French (A), not less than four hundred pages of the works of various standard authors. For examination no special authors or works are designated. Applicants should present a statement from their teachers setting forth the text-books used and the number of pages translated.

PARTIAL OR SPECIAL COURSES.

In addition to the courses above specified, students may be admitted under exceptional circumstances to pursue courses of study of a special character not leading to a degree. Such students are required to undergo such preliminary examination as may be deemed necessary to ascertain their fitness to pursue the proposed course, and when admitted they are subject to the same rules and regulations and the same examinations in the studies pursued as are other undergraduates. On completing their course they will receive, on application, certificates of proficiency in such courses as they have satisfactorily completed.

ADVANCED STANDING.

Candidates for advanced standing are examined not only in the preparatory studies, but also specially in the previous studies of the class they wish to enter, or their full equivalents.

Students from another College bringing certificates of rank and honorable dismission are permitted to recite on trial with corresponding rank in this College, until there is sufficient test of their qualifications for admission to regular standing. They will, however, be examined on whatever studies of the course may not be in the curriculum of the College from which they come, unless there are full equivalents.

No student, whether from another College or not, will be admitted to the Senior Class as a candidate for a degree after the beginning of the second term.

CONDITIONS.

Students who fail to pass in a part of the subjects in which they are examined may be admitted upon the condition that they pass a satisfactory examination on such subjects before the end of the term next after that in which they enter. The number of such conditions with which a student is admitted to the College will be determined in each case by a vote of the Faculty.

CERTIFICATES.

Certificates of the Examination Board of the School and College Association of the Middle States and Maryland, of the Regents of the University of the State of New York and of certain approved preparatory schools are received in lieu of examination for entrance. Certificates, which will be accepted only from graduates of regularly prescribed preparatory courses, must be signed by the Principal and certify only to work done during school hours. They should be filed with the Registrar before the entrance examination in June. Blank certificates will be furnished upon application. Wherever the certificate does not cover one or more of the requirements of admission or supply a satisfactory equivalent, an examination upon such subject or subjects will be required. Such certificates will not be received after one year from the completion of the period of study for which they are given unless an additional certificate of continued study accompany them.

MATRICULATION.

No student is considered a regular member of the College until after his matriculation, which takes place thirty days after his entrance. During the interval between his admission and matriculation he is, however, in all respects subject to the laws of the College.

LAFAYETTE COLLEGE.

Lafayette College is situated at Easton, Pa., upon a site of remarkable beauty, overlooking the confluence of the Delaware and Lehigh rivers. It is thoroughly furnished with the buildings and apparatus to do the work of a progressive college and polytechnic school, and also with the equipment, so important in this age, for a healthful and wholesome student life. Its large and able faculty represent the best traditions of scholarship as well as the recent extensions of scientific knowledge and the newer methods of research. It frankly recognizes its obligation to give its students training, as well as the opportunities for acquiring knowledge, and to make its discipline include moral and spiritual culture. Recent revisions of the requirements for admission and of the courses of study have been made, and it is the purpose of this bulletin to call attention to them. It will be found that these changes meet the demands of the day for liberty of choice without sacrificing the supreme consideration of thoroughness.

It is also desired to call attention to the proposed celebration of the College's SEVENTY-FIFTH ANNIVERSARY.

The first exercises were held on May 9, 1832. Owing to the inconvenience of holding a special celebration so near the Commencement season it has been decided to hold it in connection with Commencement, making Alumni Day, Tuesday, June 18th, the great day. The interest and coöperation of all the former students and friends of the College is asked in the effort to make it very memorable.

In this day of great endowments it is necessary that every College should seek constant additions to its funds in order to continue to do the work demanded of it. Recent years have brought great prosperity to the College, new buildings have been erected, new professorships endowed, and its rooms are full to overflowing with students. There is urgent demand for expansion and enlargement in every direction. The aid of every friend of the College is needed in order to take advantage of the present opportunities.

A movement is on foot to raise a fund of half a million dollars to meet the immediate needs of the College. A million could easily be used to advantage! More than half of this fund has already been subscribed. The hearty coöperation of all who love the name of Lafayette College will certainly secure the entire amount.

Among the needs to be met by this fund are the providing of a course in Mechanical Engineering; the extension of the courses in Civil and Mining Engineering; the addition of a central steam and electrical plant, of a larger gymnasium building, and of additions to the library. The competition of the state colleges and universities renders the increase of the scholarship funds very necessary. No adequate memorial—unless the very life and work of the College be so considered—of President Wm. C. Cattell, D.D., LL.D., now exists; such a memorial would be most fitting and timely. There is scarcely a department which is not asking for larger means to meet the growing demands made upon it. With the fullest appreciation of the importance of these requests the College turns to its friends for the means of granting them.

Numerous changes have been made in the different courses of study which are in part set forth in the following brief description.

THE ENGLISH LANGUAGE AND LITERATURE.

The recent retirement of Dr. Francis A. March from the active direction of the English Course will doubtless be severely felt. Dr. March, however, is still meeting his usual classes, and there will be an endeavor to continue under the direction of his son, Prof. F. A. March, Jr., the same courses of philological study of the English Language, which have been so noteworthy at Lafayette under Dr. March's direction during more than half a century.

The philological side of the study of English really begins in the Freshman year in the study of Latin, Greek and the modern languages. The Professors of foreign languages recognize that translation into English is training in English as well as in the foreign language, and much work is done in the interest of English study. During the Sophomore year the study of English is directly taken up. Trench's Lectures on the Study of Words is studied by the whole class in the hope of making the importance of philological study understood, and the Latin and General Scientifics take up the study of Bunyan's Pilgrim's Progress, Spenser's Faerie Queene, and Chaucer's Canterbury Tales in the progressive course outlined in Dr. March's Method of Study of the English Language.

Associated with the study of Bunyan are syntax, grammatical equivalents, rhetorical forms and historical elements. In each, daily recitations are heard, and the lessons learned are constantly illustrated by the text under review. With the Faerie Queene are studied derivation, romance of chivalry, and prosody.

With the Canterbury Tales are studied phonetic elements, orthographic elements, and criticism of uncertain text. All the results of previous work are kept constantly in review. During the second term of this year, hereafter, the Classicals and Scientifics will have a course in Anglo-Saxon, preparatory to the further English work.

During the Junior and the Senior years the English courses will, hereafter, be elective. In the first term, Junior, a course in Bacon will be presented, during the second term, Milton, and during the third term, Shakespeare's Julius Caesar. In the Senior year during the first term there will be a further discussion of Shakespeare's plays, in the second term the subject will be English Novels, and the whole work will be summed up in the third term by the study of Prof. Whitney's Lectures on Language.

During the Senior year a course of lectures upon literary subjects will be offered in addition to the work already described. This course, which will be under the charge of Prof. James W. Tupper, begins in the first term with lectures upon the English Romantic Poets.

Prof. Tupper will also have charge of a new course in English composition to be given to all students during the Freshman year. Each student will be required to hand in an essay each day. The work done will be directed by the Professor by means of lectures before the whole class, and the lectures will be supplemented by a personal consultation with each student at least once in every two weeks.

PHILOSOPHY.

The course in Philosophy is designed to be continuous from the beginning of the second term of the Junior to the end of the Senior year. Psychology and Logic are required during the Junior year. The Psychology occupies three hours per week during the second and third terms of the Junior year and is offered as an elective in the Senior year. During the third term of the Junior year two hours weekly are given to Logic.

In the Senior year Philosophy is both required and elective. The required work occupies three hours for the first two terms and two hours weekly for the third term. The first term of required work is devoted to lectures upon the chief problems of Epistemology and Metaphysics. These questions are approached from the historical point of view. During the second term the chief problems of Ethics, such as the *origin* of moral obligation and judgment, the *motives*, *objects* and *aims* of morality, are considered, and parallel reading is assigned upon which reports are required. The third term is occupied with a course of lectures upon the Philosophy of Religion, dealing with the various theories as to the origin and nature of religion, the relation of religion to ethics, of religion to science, the theistic arguments, etc.

An elective of two hours per week is also offered throughout the Senior year. Below is a synopsis of the course with text-books, etc.

PSYCHOLOGY.—Lectures and parallel reading, three hours per week, second and third terms Junior, required. Text-book, Angell's Psychology.

LOGIC.—Two hours, third term Junior, required. Creighton's Logic.

INTRODUCTION TO PHILOSOPHY.—Lectures three hours per week, first term Senior required. Parallel reading Roger's History of Philosophy.

ETHICS.—Lectures three hours weekly, second term Senior, required. Text-book, Mackenzie's Manual of Ethics.

Elective.—Two hours weekly throughout the Senior year, the subjects to be announced each term by the instructor. These electives include such subjects as Advanced Psychology, Types of Ethical Theory, Philosophy of Education, Greek Philosophy, German Idealism, Aesthetics, etc. They are intended to supplement the required courses in Philosophy.

BIOLOGY.

In 1894 the Biological Department was organized for the purpose of preparing those men who would later take up the study of medicine, to enter the Sophomore year of the medical schools. Its success may be judged from the fact that of all the Lafayette men who have entered the second year in the medical schools not one has failed to complete his course in good standing in three years and pass successfully the state examinations. Nearly twenty per cent. of non-college men spending four years in the medical schools fail in their state examinations.

The number of men in college preparing for medicine varies from twenty to forty. At present there are thirteen prospective students of medicine in the Senior Class. About the year 1900 Biology was made elective for all of the Juniors and Seniors in the culture courses. Since that time the average number of men pursuing biological courses has been about fifty. At the present time less than half the students of biology expect to study medicine. On this account the subject-matter of the various courses has been lately changed. During the winter term a new course in Bacteriology and Hygiene will be offered to the Juniors. This will deal with the morphology, distribution and uses of bacteria and their relations to man. The cause and prevention of disease, natural and artificial immunity, the sanitary quality of milk and other foods, water and air, and the disposal of sewage are some of the important topics concerning which laboratory work, lectures and recitations will be made to furnish much modern information. Four periods per week will be devoted to the course.

The need of training in Hygiene may be seen from the fact that in our late war with Spain, we had fourteen deaths from disease to one from wounds, and more than ninety-five percent of the deaths were due to disregard of the simplest problems in sanitation. In the late Russo-Japan war there was only one death from disease to four from wounds because as much care was used in teaching the soldiers Hygiene as in teaching them how to shoot. Bacteria, not bullets, have been the most formidable agents in warfare as well as in peace.

The course in Botany which was formerly given during the Senior year will, hereafter, be offered in the first term of the Junior year. Mammalian Anatomy will be so taught as to make it quite as valuable a preparation for the study of Psychology and Philosophy as for the study of Medicine. Work in the other branches including General Biology, Vertebrate Zoology, Physiology, Embryology and Histology, will be carried on much in the same manner as in previous years.

The work in the several courses is so arranged that a student may take up the biological studies at the beginning of any term prior to the second term of the Senior year. Those not having time for the entire course and yet desiring to know something of the habits of plants and animals, their relation to man's welfare and the marvelous processes in the evolution of the varied forms of life, should pursue the studies of the Junior year.

SYNOPSIS OF THE DIFFERENT COURSES OF STUDY.

CLASSICAL COURSE.

FRESHMAN YEAR.

First Term.

	Hours.
Algebra.—A brief review of the requirements of admission and a continuation of the study of equations	4
Greek.—Xenophon: Memorabilia; prose composition; classical geography	4
Latin.—Livy: Books I and XXI; Latin Prose; Early Roman History, and the second Punic War	4
English.—English Composition	2
Hygiene.—Lectures upon the Essentials of Health	1
The Bible.—The Bible in English and Coleman's Geography of the Bible	1

Second Term.

Algebra and Geometry.—Plane and Solid	4
Greek.—Herodotus: Select passages; old Greek life	4
Latin.—Horace: Odes; Prosody: Latin Prose	4
English.—English Composition	2
Elocution	1
The Bible.—The Bible in English	1

Third Term.

Algebra completed, Solid Geometry completed, Division B. Geometry, Trigonometry, Division A	4
Greek.—Homer: The Iliad; select passages from the first six books; Greek literature	4
Latin.—Horace: Satires and Epistles; Roman Antiquities. Throughout the year a review of Syntax and Etymology; exercises in written translation	4
English.—English Composition	2
Elocution	1
The Bible.—The Bible in English	1

Declamations, Themes, and Forensics throughout the year.

SOPHOMORE YEAR

First Term.

	Hours.
Plane and Spherical Trigonometry, Mensuration, and Plane Analytical Geometry, Division A. Trigonometry, Division B	4
GREEK.—Homer: The Iliad; select passages from Books XVIII to XXIV; Homer and the Bible compared	4
LATIN.—Cicero: DeOratore; the subjunctive mood; Roman History from the Gracchi to the Empire	4
ENGLISH.—Trench on Words	2
FRENCH	2
ELOCUTION	1
THE BIBLE.—The Greek Testament	1

Declamations, Themes, and Forensics.

Second Term.

Plane Analytical Geometry, Division B. Plane and Solid Analytical Geometry, Division A	4
GREEK.—Plato: The Apology and Crito; select passages	4
LATIN.—Christian Latin: March's Latin Hymns; derivation and formation of words; early Roman literature	4
ENGLISH.—Anglo-Saxon	2
FRENCH	2
ELOCUTION	1
THE BIBLE.—The Greek Testament	1

Third Term.

PHYSICS.—Elementary Mechanics	4
GREEK.—Aeschines against Ctesiphon	4
LATIN.—Cicero: DeOfficiis; Topics in the History of Philosophy	2
FRENCH	2
GERMAN	2
CHEMISTRY	2
ELOCUTION	1
THE BIBLE.—The Greek Testament	1

Declamations, Themes and Forensics throughout the year.

JUNIOR YEAR.

First Term.

	Hours.
PHYSICS.—Heat, Magnetism and Electricity	4
GERMAN	3
THE BIBLE.—The Epistle to the Romans in Greek	1

ELECTIVES.

One subject to be chosen from each group.

MATHEMATICS.—Calculus.	4
GREEK.—Demosthenes.	
GEOLOGY.	
ENGLISH.—Bacon.	
CHEMISTRY.—Lectures and Laboratory Work.	2
BIOLOGY.—Botany.	
FRENCH.	
HISTORY.—English History.	
LATIN.—Tacitus: Agricola; Roman Literature of the Silver Age.	2
BIOLOGY.—Mammalian Anatomy.	
GERMAN.	

Second Term.

PHYSICS.—Acoustics, Optics	4
PSYCHOLOGY	3
THE BIBLE.—The Epistles to the Romans in Greek	1

ELECTIVES.

One subject to be chosen from each group.

MATHEMATICS.—Calculus.	4
GREEK.—A play of Aeschylus or Sophocles.	
ENGLISH.—Milton.	
GERMAN (2) and GEOLOGY (2).	
CHEMISTRY.	2
BIOLOGY.—Bacteriology and Hygiene.	
FRENCH.	
HISTORY.—Constitutional History of the United States.	
LATIN.—The Drama.	2
GERMAN.	
BIOLOGY.—Bacteriology and Hygiene.	

Third Term.

	Hours.
HISTORY.—United States History	2
LOGIC	2
PSYCHOLOGY	3
THE BIBLE.—The Epistles to the Romans in Greek	1

ELECTIVES.

One subject to be chosen from each group.

MATHEMATICS.—Calculus. ENGLISH.—Shakespeare. GREEK. GERMAN (2) and GEOLOGY (2).	4
HISTORY.—Constitutional History of the United States. FRENCH. BIOLOGY.—General Biology. CHEMISTRY.	2
LATIN, Juvenal.—Roman Archaeology. GERMAN. BIOLOGY.—General Biology.	2

Declamations, Themes and Forensics throughout the year.

SENIOR YEAR.

First Term.

ASTRONOMY	4
PHILOSOPHY	3
CHURCH HISTORY.—Conflict of Christianity and Heathenism	1

ELECTIVES.

One subject to be chosen from each group.

ENGLISH.—English Romantic Poets. PHILOSOPHY. GEOLOGY.	2
INTERNATIONAL LAW. ENGLISH.—Shakespeare. MATHEMATICS.—Differential Equations. GERMAN.	2

	Hours.
BIOLOGY.—Vertebrate Zoology. ENGLISH. HISTORY.—General Constitutional History. GREEK. FRENCH.	2
BIOLOGY.—Vertebrate Zoology. CHEMISTRY. LATIN.—Lucretius.	2

Second Term.

PHILOSOPHY	3
POLITICAL ECONOMY	2
CHURCH HISTORY.—Conflict of Christianity and Heathenism	1

ELECTIVES.

One subject to be chosen from each group.

HISTORY.—Constitutional History of the United States. MATHEMATICS.—Theory of Functions. GERMAN.	2
BIOLOGY.—Physiology. ENGLISH.—English Literature. GREEK. FRENCH.—French.	2
BIOLOGY.—Physiology. CHEMISTRY. LATIN.—Inscriptions.	2
ENGLISH.—English Literature. PHILOSOPHY. GEOLOGY. BLACKSTONE.	2
ENGLISH.—English Literature. ASTRONOMY. HISTORY.—General Constitutional History. HEBREW.	2

Third Term.

PHILOSOPHY	2
PHILOLOGY	3
THE BIBLE.—History of the English Bible	1

ELECTIVES.

One subject to be chosen from each group.

	Hours.
HISTORY.—Constitutional History of the United States. MATHEMATICS.—Theory of Functions. GERMAN. BIOLOGY.—Embryology and Histology.	2
ENGLISH.—English Literature. GREEK. FRENCH. BIOLOGY.—Embryology and Histology.	2
CHEMISTRY. LATIN.—Inscriptions; Pliny. BIOLOGY.—Embryology and Histology.	2
ENGLISH.—English Literature. PHILOSOPHY. BLACKSTONE.	2
HEBREW. ENGLISH.—English Literature. ASTRONOMY. HISTORY.—General Constitutional History. GEOLOGY. POLITICAL ECONOMY.	2

Themes and extemporaneous speaking throughout the year.

LATIN SCIENTIFIC COURSE

The course of study is the same as the Classical Course except as follows:

FRESHMAN YEAR.

German is substituted for Greek, four hours a week being given to this subject during the three terms.

SOPHOMORE YEAR.

First and Second Terms.

The Bible is read in Latin instead of Greek. English and German are substituted for Greek, two hours a week being given to each. The English study for the First Term is Bunyan and for the Second Term, Chaucer.

Third Term.

The Bible is read in Latin instead of Greek. English (Chaucer) is substituted for Greek.

JUNIOR YEAR.

First Term.

The Bible is read in Latin instead of Greek. English History is substituted for German.

After First Term, Junior year, the schedule for the Latin Scientific Course is the same as the Classical, except that during the Second and Third Term, Junior year, the Bible is read in Latin instead of Greek.

(For schedule of study of the Classical Course see pages 25–30).

GENERAL SCIENTIFIC COURSE.

FRESHMAN YEAR.

First Term.

	Hours.
ALGEBRA	4
ENGLISH.—English Composition	2
CHEMISTRY.—Lecture and Laboratory Work	4
DRAWING.—Industrial Drawing	2
GERMAN	2
FRENCH	2
HYGIENE.—Lectures	1
THE BIBLE.—The Bible in English	1

Second Term.

TRIGONOMETRY AND MENSURATION	5
ENGLISH.—English Composition	2
CHEMISTRY	2
GERMAN	2
FRENCH	2
DRAWING	2
THE BIBLE.—The Bible in English	1

Third Term.

	Hours.
Trigonometry and Mensuration	2
Analytical Geometry	3
English.—English Composition	2
Chemistry	2
French	2
German	2
Drawing.—Projections	2
The Bible.—The Bible in English	1

Sophomore Year.

First Term.

Analytical Geometry	3
Differential Calculus	2
Descriptive Geometry	2
English.—Trench on Words 2. Bunyan 2	4
German	2
French	2
Chemistry	2
The Bible.—The Bible in French	1

Second Term.

Calculus.—Differential and Integral	5
Descriptive Geometry	3
English.—Anglo-Saxon	3
English.—Spenser	2
Chemistry	2
German or French	2
The Bible.—The Bible in French	1

Third Term.

Physics.—Elementary Mechanics	4
English.—Chaucer	4
Biology.—Sanitary Biology	4
Chemistry.—Analytical Chemistry	2
The Bible.—The Bible in French	1

JUNIOR YEAR.

First Term.

	Hours.
PHYSICS.—Heat, Magnetism and Electricity	4
HISTORY.—English History	2
ELOCUTION	1
THE BIBLE.—The Bible in German	1

ELECTIVES.

One subject to be chosen from each group.

MATHEMATICS.—Calculus. GREEK. GEOLOGY. ENGLISH.—Bacon.	4
CHEMISTRY. BIOLOGY.—Botany. FRENCH. HISTORY.—English History.	2
BIOLOGY.—Mammalian Anatomy. GERMAN.	2

After the First Term, Junior year, the schedule of study for the General Scientific Course is the same as the Classical Course except that during the rest of the Junior year the Bible is read in German instead of Greek. (For schedule of study of the Classical Course see pages 25-30.)

CIVIL ENGINEERING COURSE.

FRESHMAN YEAR.

First Term.

	Hours.
MATHEMATICS.—Algebra (Wentworth)	4
CHEMISTRY.—Lectures and Recitations (Hart)	4
MODERN LANGUAGES.—German Grammar, Composition, and Translation, 2; English, 2	4
DRAWING.—Elements of Industrial Drawing; Plane Problems	2
HYGIENE.—Lectures on Health	1
THE BIBLE	1

Second Term.

	Hours.
MATHEMATICS.—Trigonometry (Crawley's)	5
CHEMISTRY.—Lectures and Laboratory Practice	2
MODERN LANGUAGES.—French, 2; German, 2; English, 2	6
DRAWING.—Projections; Plates; Free-hand Lettering	2
THE BIBLE	1

Third Term.

MATHEMATICS.—Spherical Trigonometry (Crawley's) and Analytical Geometry (Ashton's); Mensuration (Hall)	5
MODERN LANGUAGES.—French (continued), 2; German (continued), 2; English, 2	6
DRAWING.—Projections (Model Drawing); Plates	2
SURVEYING.—Instruments and their use	1
CHEMISTRY	2
THE BIBLE	1

Throughout the year—Themes.

SUMMER SCHOOL OF SURVEYING (in vacation.)...Three weeks.

SOPHOMORE YEAR.

First Term.

MATHEMATICS.—Analytical Geometry (Ashton's), Differential Calculus (Hall)	5
DESCRIPTIVE GEOMETRY (Hall)	2
MODERN LANGUAGES.—French, 2; German, 2; English: Trench on Words, 2	6
SURVEYING.—Lectures, Recitations, Adjustments of Instruments; City and Mine Surveying; Leveling; Stadia; Plane Table; Area Computations	2
CHEMISTRY	2
THE BIBLE	1

Second Term.

MATHEMATICS.—Differential and Integral Calculus (Hall)	5
DESCRIPTIVE GEOMETRY (Hall)	3
MODERN LANGUAGES.—German, 2; French, 2; Rhetoric, 1	5
DRAWING—SURVEYING.—Map of Survey; Calculation of Areas	2
ANALYTICAL CHEMISTRY	2
THE BIBLE	1

Third Term.

	Hours.
Mathematics.—Least Squares and Differential Equations	3
Mechanics.—Elementary Mechanics	2
Physics (one laboratory period)	4
Descriptive Geometry	2
Chemistry.—Lectures and Laboratory	2
Surveying	2
Railroads.—Lectures, Recitations and Office Work. Railroad Reconnaissance, Location and Construction	3
The Bible	1

Summer School of Surveying (in vacation)....Three weeks.

Junior Year.

First Term.

Physics.—Heat, Magnetism, and Electricity (one period in laboratory)	4
Applied Mechanics	4
Chemistry.—Metallurgy of Iron and Steel	2
Mineralogy.—Crystallography	2
Railroads.—Office Work; Paper Location; Earth-work Calculation; Overhaul; Map of Location, Railroad, Construction; Lectures, Recitations	3
The Bible	1

Second Term.

Mechanics.—Theory and Conditions of Equilibrium. Centre of Gravity. Moment of Inertia. Solution of Problems	4
Physics.—Acoustics; Optics (one period in laboratory)	4
Mineralogy.—Descriptive	2
Resistance of Materials.—Elasticity and Strength of Wood, Stone, and Metals. Theory of Columns, Shafts, and Beams. Testing Laboratory	5
Roads and Pavements.—Lectures and Recitations	2
The Bible	1

Third Term.

	Hours.
Machinery.—Steam Engine, Elevators, Cranes. Lectures and Text-book	4
Resistance of Materials.—Theory of Continuous Trains. Combined Stresses, Concrete Beams and Columns Reinforced. Resilience and Work. Principle of Least Work. Impact and Fatigue. True Internal Stresses. Guns and Thick Cylinders, Rollers, Plates and Spheres. Testing Laboratory	4
Municipal Engineering.—Lectures and Recitations	2
Mineralogy	3
Sanitary Biology	2
The Bible	1
Themes	

Summer School of Surveying (in vacation)......Three weeks.

Senior Year.

First Term.

Bridges and Roofs.—Theory and Calculation of Stresses in Simple Trusses by Numerical and Graphical Methods. Designing of a Roof-truss	6
Hydraulics.—Theory of Hydrostatics. Efflux of Water from Orifices and Tubes. Weirs. Flow in Pipes, Canals, and Rivers. Hydraulic Motors. Laboratory Work	5
Geology	2
Astronomy.—Descriptive Astronomy. Text-book and Lectures	2
Bible	1

Second Term.

Laboratory Work.—Testing Laboratory; Hydraulic Laboratory; Cement Laboratory	2
Geology.—Historic and Dynamic. Text-book and Lectures	2
Astronomy.—Practical Astronomy. Observatory Work	2
Political Economy	2
Bible	1

ELECTIVES.

	Hours.
1. BRIDGES.—Theory and Calculation of Stresses in Continuous, Cantilever, and Suspension Bridge by Numerical and Graphical Methods. Designing of Plategirders and Riveted Bridges, with Working Drawings. Estimates and Contracts	9
2. MUNICIPAL ENGINEERING. WATER SUPPLY.—Source and Supply of Water for Towns. Designing, Construction, and Maintenance of Systems	9

Third Term.

SURVEYING.—Field and Office Work. Precise Triangulation and Leveling. Elements of Geodesy	2
THESIS for Graduation	2
BIBLE	1

ELECTIVES.

1. BRIDGES.—Design of a Pin-connected Bridge, with Working Drawings. Bill of Material. Estimates and Contracts	11
ERECTION.—Designing of False Work, and Erecting of Bridges. Practice in Erecting a Full-weight Pin-connected Bridge	11
2. MUNICIPAL ENGINEERING; SANITARY.—Designing, Construction, and Maintenance of Sewerage Systems. Sewage Disposal. Drainage, Ventilation, and Heating of Buildings. Street Cleaning and Garbage Disposal	11

MINING ENGINEERING COURSE.

The Freshman and Sophomore years are the same as in Civil Engineering (see page 33).

JUNIOR YEAR.

First Term.

	Hours.
MECHANICS.—Theory and Conditions of Equilibrium, Centre of Gravity, Moment of Inertia, Solution of Problems	4

	Hours.
Physics—Heat, Magnetism, and Electricity (one period in laboratory)	4
Surveying.—Lectures, Recitations, Field and Office work. Topographical Survey and Leveling. Map of survey	3
Mineralogy.—Crystallography	2
Chemistry.—Quantitative Analysis	2
The Bible.—New Testament Epistles, in German	1

Second Term.

Applied Mechanics	4
Resistance of Materials.—Elasticity and Strength of Wood, Stone, and Metals. Theory of Columns, Shafts, and Beams. Testing Laboratory	5
Physics.—Acoustics. Optics (one period in laboratory)	4
Constitution of the United States	2
Mining	2
Mineralogy.—Descriptive Mineralogy	2
The Bible	1
Spanish (Optical)	2
Mining.—Practical Work in the Mines in the Spring Vacation.	

Third Term.

Resistance of Materials.—Testing Laboratory	4
Steam Engineering	4
Mineralogy.—Determinative	3
Mine Engineering	2
Railroad Engineering	2
The Bible	1
Mining.—Map of Mine Survey.	
Throughout the year.—Themes.	
Summer School of Surveying (in vacation)	Three weeks.

SENIOR YEAR.

First Term.

Hydraulics.—Theory of Hydrostatics. Flow of Water in Pipes, Canals, and Rivers. Weirs. Efflux of Water from Orifices and Tubes. Hydraulics. Motors	5

	Hours.
Mechanical Engineering	2
Metallurgy	2
Geology	2
Mining.—Prospecting, Deep Boring, Blasting and Quarrying	6
Biblical Study	1

Second Term.

Metallurgy	2
Geology	2
Assaying	4
Political Economy	2
Mining.—Shaft Sinking, Tunneling, Exploitation, Haulage, and Winding	5
Biblical Study	1

Third Term.

Field Geology	2
Economic Geology.—Lectures, Recitations, and Field Work	2
Electrical Engineering.—Electric Lighting and Electric Mine Machinery	2
Mining.—Ventilation, Drainage, Mechanical Separation of Ores. Designs for, and Reviews of, Special Mining Operations	9
Biblical Study	1
Graduation Thesis.	

ELECTRICAL ENGINEERING COURSE.

The studies of the Freshman and of the Sophomore years are the same as in the Civil Engineering Course, except that in the Sophomore year Physical Laboratory work takes the place of surveying.

JUNIOR YEAR.

First Term.

	Hours.
Physics.—Heat, Electricity. Lectures and Recitations	4
Physical Laboratory.—Electricity	2
Electrical Engineering	2

	Hours.
Applied Mechanics	4
Drawing.—Descriptive Geometry	4
Mineralogy	2
The Bible	1

Second Term.

Applied Mechanics	4
Resistance of Materials	3
Physics.—Acoustics. Optics. Lectures and Recitations	4
Elements of Mechanism	2
Physical Laboratory.—Electrical Measurements	2
United States Constitution	2
The Bible	1

Third Term.

Electrical Engineering.—Dynamo Electric Machinery	2
Laboratory	2
Resistance of Materials	3
Steam Engine	4
Mineralogy	3
The Bible	1
Themes.	

Senior Year.

First Term.

Electrical Engineering.—Dynamo Electric Machinery	6
Laboratory. Electrical Testing	2
Hydraulics	5
Drawing.—Machine Designing and Drawing	2
The Bible	1

Second Term.

Electrical Engineering.—Alternating Currents	6
Electric Transmission	3
The Electric Telegraph	1
Laboratory	2
Methods of Electrical Testing	1
Political Economy	2
The Bible	1

Third Term.

	Hours.
Electrical Engineering.—Alternating Current Machinery	6
The Electric Railroad	3
The Telephone	2
Laboratory. Electrical Testing	2
Designs for, and Reviews of, Electrical Engineering Works.	
History	2
The Bible	1
Thesis.	

Each term throughout the course—Elocution.

Note.—Laboratory work, as herein stated in "hours," represents three hours actual work, the "hour" indicating a "period" of that length.

CHEMICAL COURSE.

The Freshman and Sophomore years are the same as in the Civil Engineering Course, except that in the latter year Chemistry takes the place of Surveying in the first, second and third terms, of Descriptive Geometry in the second term and of Drawing in the third.

Sophomore Year.

Third Term.

	Hours.
Mechanics.—Elements of Mechanics (Moore) (one period in laboratory)	4
Analytical Chemistry.—Laboratory	6
Chemical Arithmetic	3
Organic Chemistry	2
The Bible.—The Acts	1

Throughout the year—Declamations and Themes.

Junior Year.

Physics.—Heat, Electricity, Magnetism, Optics, and Acoustics, (First two terms) (one period in laboratory)	4
Mineralogy.—*First term*	2
Second term	2
Third term	3
Scientific German	1

	Hours.
Chemistry.—Theoretical and Practical, including Qualitative and Quantitative Analysis, and Laboratory work in Organic Chemistry, and in Assaying. (8 hours first and second terms; 12 hours third term)	8–12
The Bible.—New Testament Epistles, in German	1
Throughout the year—Declamations and Themes.	
Sanitary Biology	2

Senior Year.

Chemistry.—Advanced work in all departments of Chemistry, Metallurgy, Chemical Technology, with special work in some selected department. (14 hours first term; 12 hours second term; 14 hours third term)	12–14
Geology.—First term	2
Second term	2
Political Economy.—General Principles. (Second term)	2
History.—Lectures on the development of European institutions. (Third term)	2
Scientific German	1
The Bible.—History and Evidences	1
Throughout the year—Themes and Extemporaneous Speaking. Chemical theses.	

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